Jones is, or has been, a member of a number of local, national and international decision-making commissions and professional associations. In 2002, then-Governor Gray Davis appointed her to the California Seismic Safety Commission, and she was reappointed by Governor Arnold Schwarzenegger in 2005. The work of the Commission has led to two bills now before the California Legislature. Jones has advised the California Office of Emergency Services on the state's earthquake-prediction and response plans and has briefed the U.S. Congress and other high-level officials.

Generous with her time, Jones estimates that since joining the USGS she

The magnitude-5.0 Pasadena earthquake in 1988 was the most memorable [for me]. It was almost directly beneath my house during the night and literally threw us out of bed. Also, it was the first time my oldest child, Sven, then 2 years old, saw me on TV (in that case, a live interview) and told my husband, 'Mommy's in the TV!' - Lucy Jones

has given more than 200 talks to civic groups, teachers associations and the public. From 2- and 3-year-olds at preschool

to retirement home residents, Jones has provided science education with a focus on hands-on inquiry to a variety of audiences and age groups. She has worked to empower those who are frightened by repeated earthquakes with the message "you can keep yourself safe."

All these efforts have earned her many professional awards, not only in her specialty of seismology, but also from educators, civic groups, safety officials and from the media. In 2000, she was awarded the Alquist Medal for "significant contribution to earthquake safety in California." This year, she became the second non-journalist to win a Golden Mike Award from the Radio and TV News Association of Southern California for a radio-news special that drew lessons from Katrina for a future big earthquake in Los Angeles.

# Top 10 Things Northern Californians Should Do to Prepare for the Next Big Earthquake

Excerpted from material by the 100th Anniversary disabled and other vulnerable residents. Earthquake Conference Steering Committee

he people, businesses and government agencies in Northern California will risk suffering loss of life and structural and financial damage when major earthquakes strike. Scientists, engineers and emergency-management experts gathering for the 100th Anniversary Earthquake Conference call on the region's citizens, businesses and governments to take the following actions to increase safety, reduce losses and ensure a speedier recovery when the next major earthquake strikes.

#### Develop a Culture of Preparedness at Home, Work and School

- 1. Know the seismic risks of the buildings you inhabit, the transportation systems you use and the utilities that serve them, and the actions you can take to protect yourself.
- 2. Be prepared to be self-sufficient for up to three days (72 hours) following a disaster.
- 3. Take steps to ensure adequate response care for all special-needs populations — seniors, the poor, the

4. Get involved in preparing the region to respond to and recover from major earthquakes. This includes region-wide, multi-organizational plans, training, exercises and coordination assessments, as well as continuing improvements in our collective understanding of seismic risks.

### **✓** Ensure Resiliency in Recovery

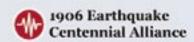
- 8. Collaboratively plan for the regional relocation and housing, both short- and long-term, of residents displaced by potential fires, uninhabitable buildings or widespread economic and infrastructure disruption following a major earthquake.
- 9. Assess and plan for financing your likely repair and recovery costs following a major earthquake.
- 10. Ensure adequate post-event funding to provide economic relief to individuals and communities after a major earthquake, when resources are scarce yet crucial for recovery and reconstruction.

In conclusion, the earthquake professionals of the 100<sup>th</sup> Anniversary Earthquake Conference believe that, based on our current understanding of the hazards, local planning, stronger building codes and ongoing mitigation have substantially reduced the potential loss of life and

property that a major Northern California earthquake could cause. While many areas are better prepared than ever before, the region is not yet sufficiently ready for the next major earthquake, and the social and economic consequences could prove to be long-lasting and ruinous to communities. A renewed emphasis on preparedness and safety is needed to fully prepare Northern California for a major natural disaster.

## ✓ Invest in Reducing Losses

- 5. Target those buildings that pose the greatest risk of collapse for seismic mitigation through retrofit, reduced occupancy or reconstruction.
- 6. Retrofit or replace all facilities essential for emergency response to ensure that they function following earthquakes. These facilities include fire and police stations, emergency communications centers, medical facilities, schools, shelters and other community-serving facilities.
- 7. Set priorities, and retrofit or replace vulnerable emergency- and community-serving infrastructure including cellular communications, airports, ports, roads and bridges, transportation, water, dams and levees, sewage, and energy supplies — to ensure that functions can be resumed rapidly after earthquakes.





Earthquake Engineering Research Institute







# USGS Earthquake Scientists — A Nationwide Notion of Pride



#### **John Solum**

Title: Mendenhall Fellow, Earthquake

Location: Menlo Park, Calif.

Length of service with the USGS: 1 year

My proudest moment has definitely been working with the team of scientists from a large number of academic institutions, as well as the USGS, on the San Andreas Fault Observatory at Depth (SAFOD), which is part of the EarthScope project funded by the National Science Foundation.

The SAFOD hole successfully crossed the active San Andreas Fault at a depth of several kilometers this past summer. I spent the summer of 2005 driving between Menlo Park and the SAFOD site near Parkfield, Calif., spending a few days here and there at the drill site to lend a hand, and then driving back to Menlo Park to analyze samples using a powder X-ray diffractometer (a lot of people were also kind enough to ferry samples up to me from the drill site).

In Menlo Park, I also helped to prepare the sidewall and spot cores that came up from the hole, with the help of Sarah Draper (Utah State University), Sheryl Tembe (SUNY Stony Brook), Fred Chester (Texas A&M), Joe Svitek (USGS Menlo Park), Steve Hickman (USGS Menlo Park) and Dave Lockner (USGS Menlo Park). We devoted a lot of long hours to extracting the cores from the pieces of drilling equipment they were collected with and then preserving them, making thin sections from them and making a first pass at describing their mineralogy.

There were three sessions on SAFOD at the annual meeting of the American Geophysical Union in San Francisco in December 2005 (Naomi Boness, a post-doctoral student at

Stanford University, and I were the conveners of those sessions). It was very heartening for me to see all of the effort that people had put into analyzing results from SAFOD pay off with a lot of really nice presentations at that meeting. I'm a newcomer to the SAFOD project, and I feel very privileged to have been able to work with so many highly dedicated scientists.